National Profile

The National Profile section contains figures showing trends and distribution of sexually transmitted diseases (STDs) by age, gender, race/ethnicity, and location for the United States. Where relevant, the figures illustrate progress toward specific year 2000 goals for the nation published in *Healthy People 2000: Midcourse Review and 1995 Revisions.**

*See Appendix for Healthy People Year 2000 Revisions.

Chlamydia

Infections due to *Chlamydia trachomatis* are among the most prevalent of all sexually transmitted diseases. In women these infections often result in pelvic inflammatory disease, which can cause infertility, ectopic pregnancy, and chronic pelvic pain. Data from a randomized controlled trial of chlamydia screening in a managed care setting suggest that such screening programs can reduce the incidence of PID by as much as 60%[1]. In addition, pregnant women infected with chlamydia can infect their babies during delivery.

While case reporting of chlamydial infections is improving, it remains incomplete in many areas of the country. A combination of factors limit the documentation of the incidence and prevalence of genital chlamydial infection: variable compliance with public health laws and regulations that require health care providers and laboratories to report cases to local health authorities; large numbers of asymptomatic persons who can be identified only through screening; limited resources to support screening activities; and incomplete information management systems for collecting, maintaining, and analyzing case reporting and prevalence data. Thus, for most areas, the number of chlamydia cases reported to CDC by state health departments reflects many factors, only one of which is number of infections in the population. For defined populations of sexually active women, data on prevalence obtained through routine screening can provide a more accurate measure of the true burden of disease.

- In 1998, 49 states and the District of Columbia required reporting of chlamydia and reported cases to CDC. For the state of New York, only cases from New York City were reported (Figure 1, Table 5).
- In 1998, 607,602 chlamydial infections were reported to CDC from 49 states, the District of Columbia and New York City (Table 1). Reported cases of chlamydia far exceed reported cases of gonorrhea (355,642 gonorrhea cases in 1998, Table 1).
- From 1987 through 1998 reported rates of chlamydia increased from 50.8 cases per 100,000 persons to 236.6 (Figure 2, Table 1). This trend reflects increased screening, recognition of asymptomatic infection (mainly in women), and improved reporting, as well as the continuing high burden of disease.
- For the years 1996-1998, the chlamydia case rate of the South (203.9, 229.9, and 271.9 respectively) was highest among the four regions, reflecting a recent expansion of screening activity in the South. Before 1996, reported chlamydia rates were highest in the West and Midwest, where substantial public resources had been committed for screening programs (e.g., in family planning clinics) (Table 5, Figures 3 and 4).
- Between 1997 and 1998, rates of chlamydia reported from selected large cities (over 200,000 population) increased 10% from 333.5 cases per 100,000 persons to 366.4 (Figure 5, Table 9).
- In 1998, reported rates of chlamydia for women (382.2 per 100,000 persons) exceeded those for men (83.1) (Figure 6, Tables 6, 7, 10, and 11). This is mainly

due to detection of asymptomatic infection in women through screening. The low rates in men suggest that many of the sex partners of women with chlamydia are not diagnosed or reported. In addition, men diagnosed as having non-gonococcal urethritis are treated but frequently not tested. A large proportion of these men are infected with chlamydia, but they are not detected by surveillance systems based on laboratory reporting of positive chlamydia tests.

- Rates of chlamydia for women were highest in the 15- to 19- year-olds (2,359.4 per 100,000) and in 20- to 24-year-olds (1,952.7). For men, age-specific rates were also highest in these age groups (Figure 7, Table 3B).
- Chlamydia screening and prevalence monitoring activities were initiated in Health and Human Services (HHS) Region X in 1988 as a CDC-supported demonstration project. In 1993, chlamydia screening services for women were initiated in three additional HHS regions (III, VII, and VIII) and, in 1995, in the remaining HHS regions (I, II, IV, V, VI, and IX). In some regions, federally-funded chlamydia screening supplements local- and state-funded screening programs.
- In 1998, state-specific chlamydia test positivity among 15- to 24-year-old women screened varied from 2.4% to 11.3% among those attending family planning clinics (Figure 9).
- The effectiveness of large-scale screening programs in reducing chlamydia prevalence in women has been well documented in areas where this intervention has been in place for several years. For example, the screening programs in Health and Human Services Region X (Alaska, Idaho, Oregon, Washington) family planning clinics have demonstrated a decline in chlamydia positivity of 60% since 1988 among 15- to 44-year-old women (Figure 10).
- In 1998, chlamydia test positivity increased in nine of ten HHS regions compared with 1997. However, these reported increases are most likely due to changes in laboratory test method and associated increases in test sensitivity;[2] expansion of screening programs to populations with higher prevalence of disease may also have contributed to these increases.
- Additional information on chlamydia screening programs for women of reproductive age and chlamydia among adolescents and minority populations can be found in the **Special Focus Profiles** section.

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[1]Scholes D, Stergachis A, Heidrich FE, Andrilla H, Holmes KK, Stamm WE. Prevention of pelvic inflammatory disease by screening for cervical chlamydial infection. *N Engl J Med* 1996;34(21):1362-66.

[2]Dicker LW, Mosure DJ, Levine WC, et al. The impact of switching laboratory tests on reported trends in *Chlamydia trachomatis* infections. *Am J Epidemiol* (in press).

Figure 1. Chlamydia — Number of states that require reporting of *Chlamydia trachomatis* infections: United States, 1987–1998

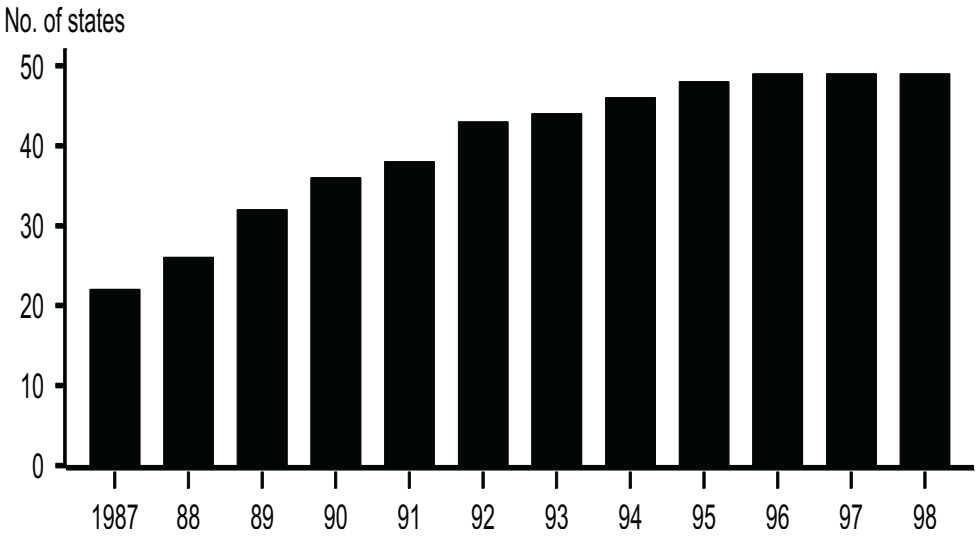
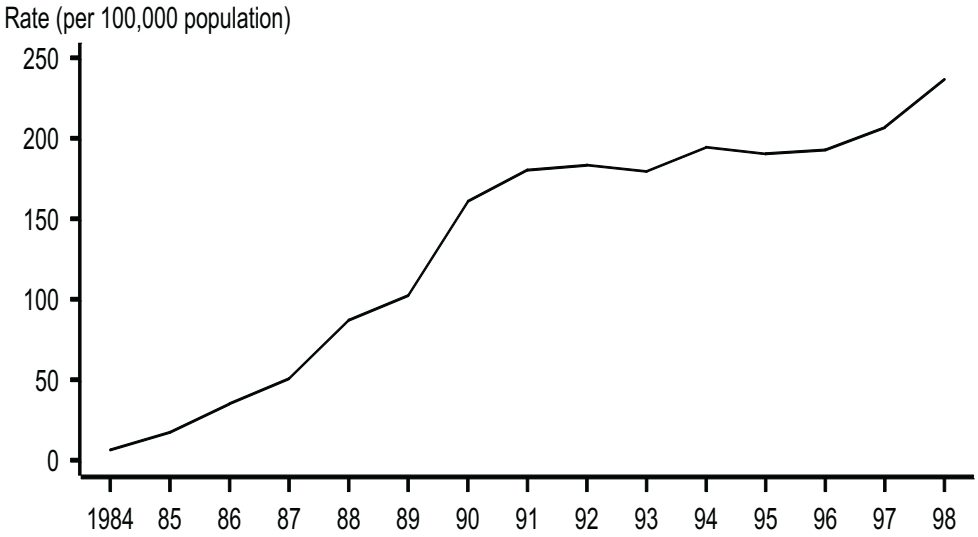
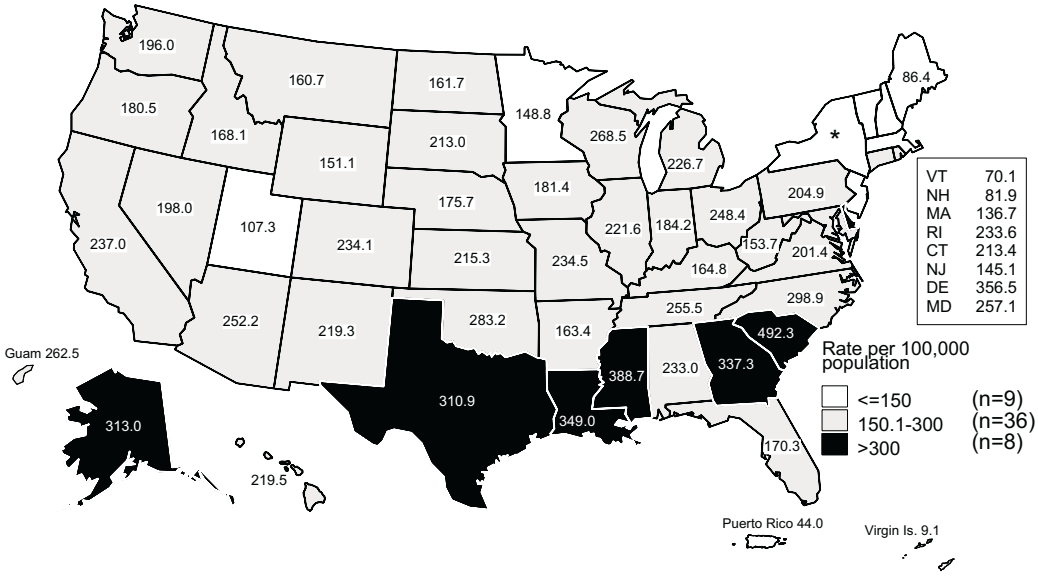


Figure 2. Chlamydia — Reported rates: United States, 1984–1998



Note: For further information on chlamydia reporting, see the Appendix.

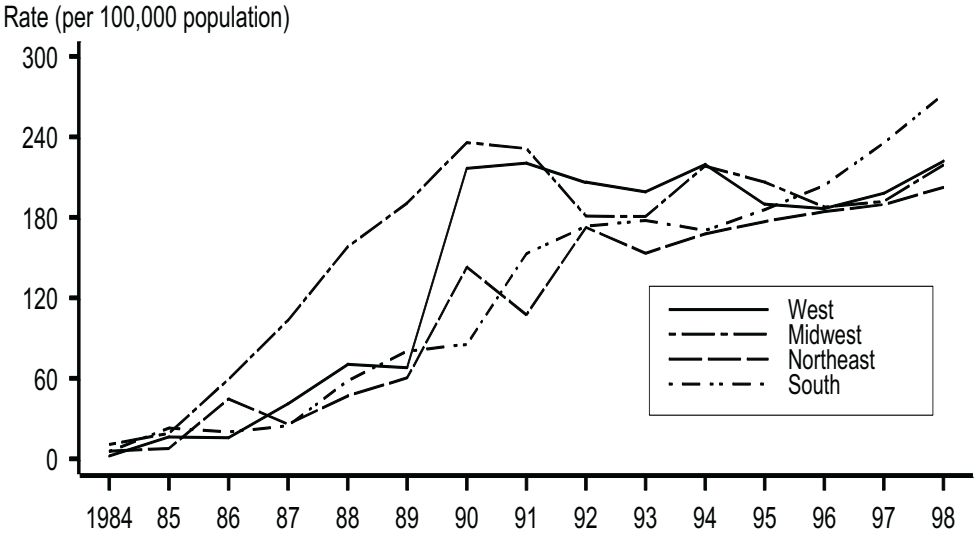
Figure 3. Chlamydia — Rates by state: United States and outlying areas, 1998



*The New York City rate was 357.1 per 100,000 population. No cases were reported outside of New York City.

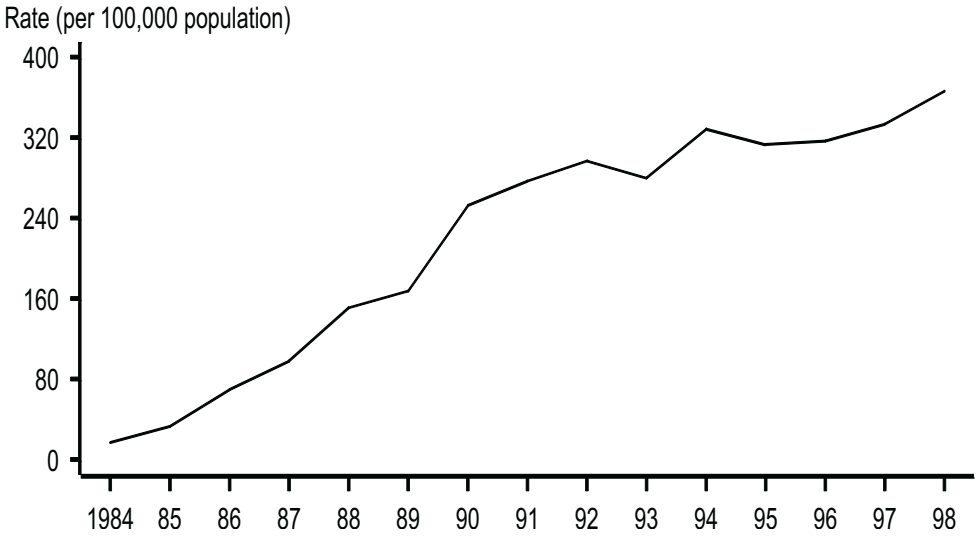
Note: The total rate of chlamydia for the United States and outlying areas (including Guam, Puerto Rico and Virgin Islands) was 233.7 per 100,000 population. For further information on chlamydia reporting, see the Appendix.

Figure 4. Chlamydia — Rates by region: United States, 1984–1998



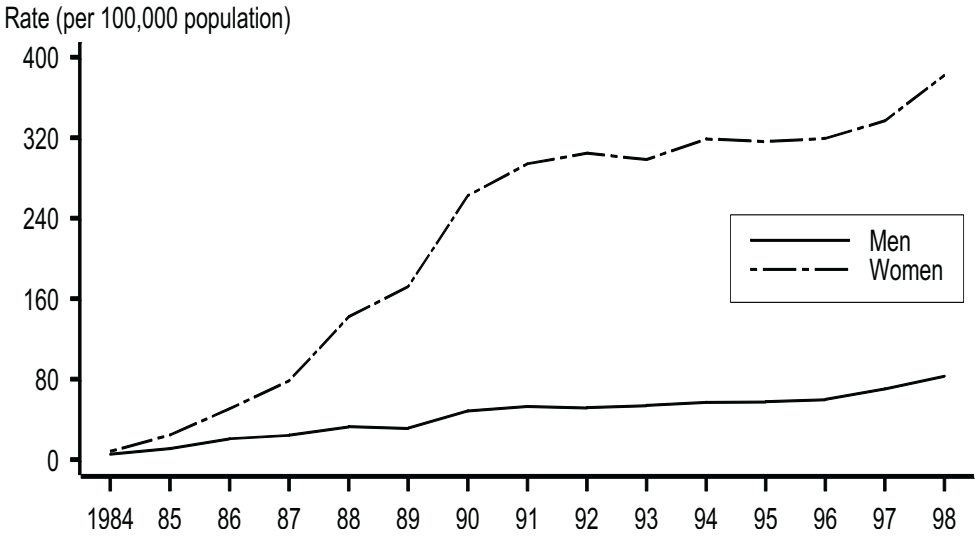
Note: For further information on chlamydia reporting, see the Appendix.

Figure 5. Chlamydia — Rates in selected U.S. cities of >200,000 population, 1984–1998



Note: For further information on chlamydia reporting, see the Appendix.

Figure 6. Chlamydia — Rates by gender: United States, 1984–1998



Note: For further information on chlamydia reporting, see the Appendix.

Figure 7. Chlamydia — Age- and gender-specific rates: United States, 1998

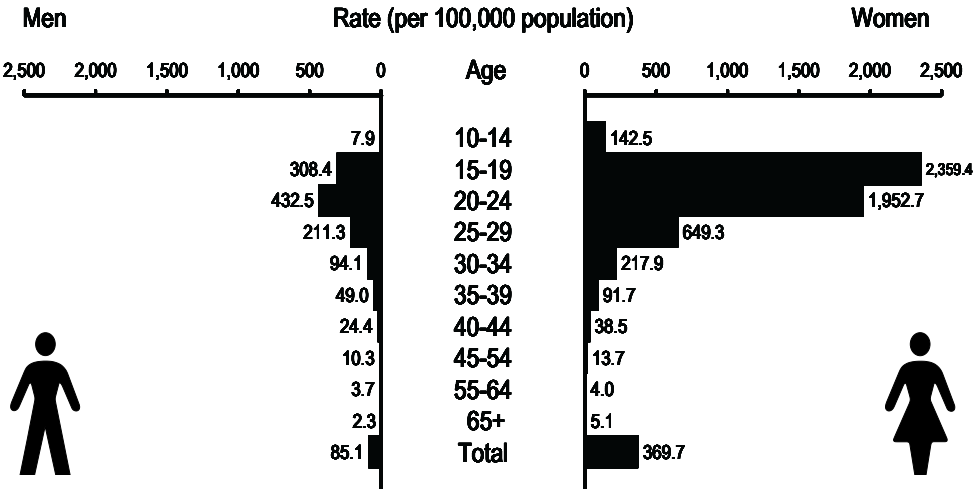
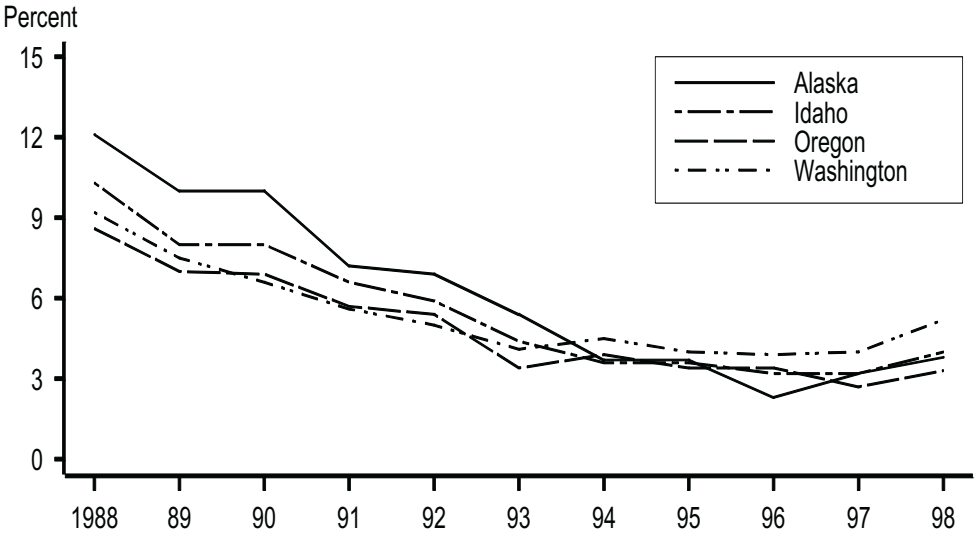


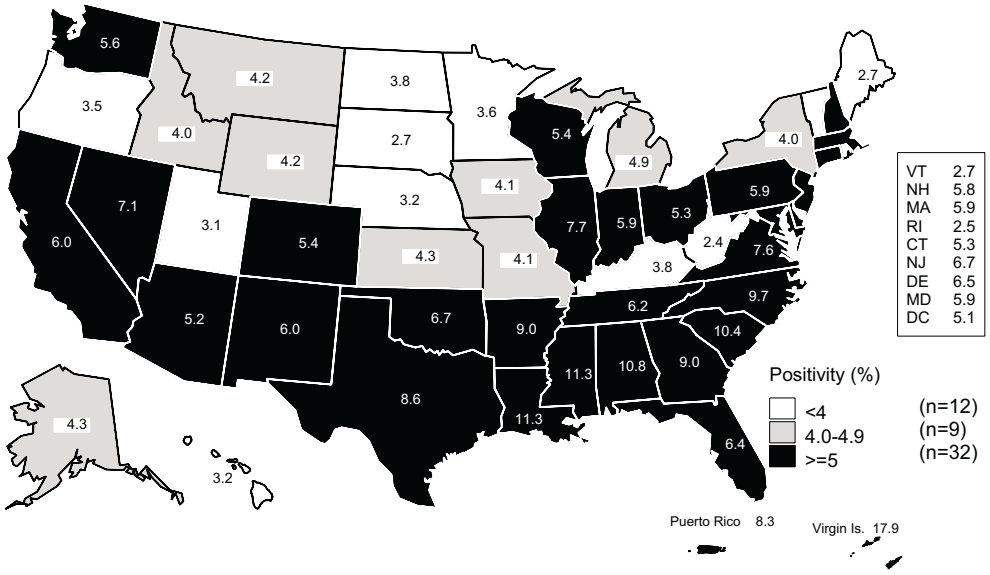
Figure 8 . Chlamydia — Positivity among women tested in family planning clinics by state: Region X, 1988–1998



Note: Women who met screening criteria were tested. Trends not adjusted for changes in laboratory test method in 1994 and 1998 and associated increases in test sensitivity.

SOURCE: Regional Infertility Prevention Program: Region X Chlamydia Project (Alaska, Idaho, Oregon and Washington)

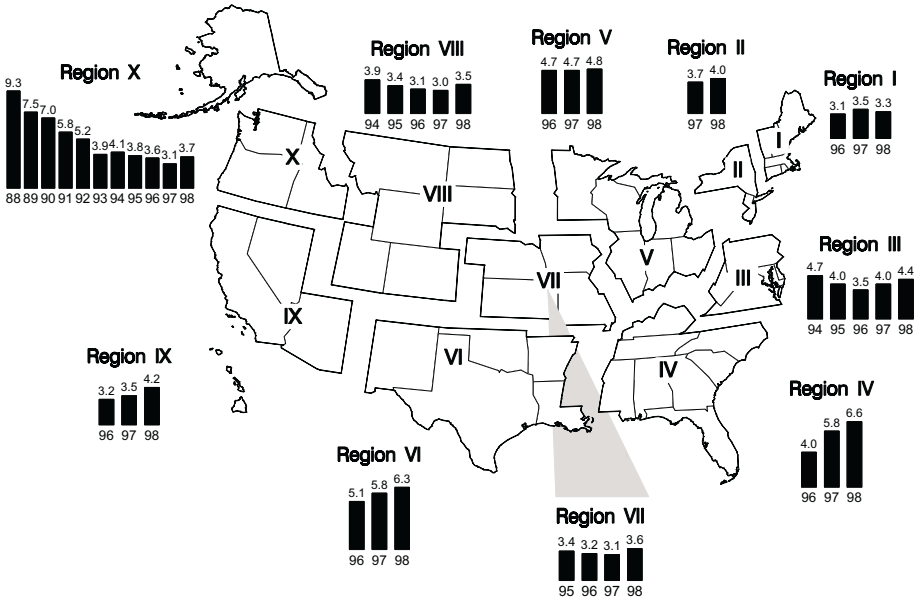
Figure 9. Chlamydia — Positivity among 15-24 year old women tested in family planning clinics by state, 1998



Note: States reported chlamydia positivity data on at least 500 women aged 15-24 years screened during 1998 except for: Rhode Island - chlamydia positivity data reported for July-December only; Puerto Rico - chlamydia positivity data reported for January-April only; and Virgin Islands - chlamydia positivity data reported for April-December only.

SOURCE: Regional Infertility Prevention Programs; Office of Population Affairs; Local and State STD Control Programs; Centers for Disease Control and Prevention

Figure 10. Chlamydia — Trends in positivity among 15-44 year old women tested in family planning clinics by HHS regions, 1988–1998



Note: Trends not adjusted for changes in laboratory test method in 1998 and associated increases in test sensitivity. See Appendix for definition of Health and Human Services (HHS) regions.

SOURCE: Regional Infertility Prevention Programs; Office of Population Affairs; Local and State STD Control Programs; Centers for Disease Control and Prevention